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DISASTER MANAGEMENT AND PREPAREDNESS: A CASE STUDY OF UNIVERSITY OF JOS LIBRARY

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Abstract

The purpose of this study was to examine the level of staff preparedness towards fire disaster in University of Jos Library. Survey research method was adopted for the study. The measuring instrument comprised of questionnaire and interview. Out of the 106 copies of questionnaire distributed 104 (98.11%) were filled, returned and found suitable for use. After-which simple frequency tables, percentages, means and weighted averages were used to analyse the results. For the interview, a face-to-face interactive session was held between the researchers and the University Librarian on issues of Disaster Management Plan in the Library. Results obtained from the analyses of the questionnaire revealed that majority of the respondents were very aware of the fire-safety rules and safety measures in the Library, this was indicated by a weighted average of 3.80 (82%). Furthermore, majority of the respondents were moderately aware of the availability of fire-fighting equipment in the Library, this was also indicated by a weighted average of 2.64 (66.01%). However, majority of the respondents were not prepared towards using the fire-fighting equipment, this was further indicated by a weighted average of 1.39 (34.83%). The results also revealed that majority of the respondents seldom checked the functionality of the fire-fighting equipment, this was indicated by a weighted average of 2.02 (40.4%). More-so, majority of the respondents were not aware of what to do towards salvaging partly damaged library resources in print and in digital media, this was also indicated by a weighted average of 1.55 (38.75%) and majority of the respondents were not prepared towards salvaging partly damaged resources in print and in digital media, this was further indicated by a

weighted average of 1.4 (35%). Finally, majority of the respondents agreed that there were constraints encountered when managing fire disaster in the Library, this was indicated by a weighted average of 3.18 (79.5%). The interview result revealed that there is a Disaster Management Plan that was developed some years ago in the Library, and the Plan is still presently in use. It was therefore recommended among others that the Library Staff should be informed by the Library Management of the availability of a Disaster Management Plan in the Library. They should also be assigned different roles to play in order to manage disaster based on the outline of the Plan. The Disaster Management Plan should also be evaluated by a Committee to find out if there is need to review its content. Finally, there is also the need for acquisition and installation of more fire-fighting equipment including modern equipment and Staff should be trained on the use of the equipment.

Key words: Fire, disaster, management, staff and preparedness

Introduction

The planet earth where man lives has experienced disaster of different kinds in the course of time. Disaster when it occurs, can affect buildings such as schools, hospitals, shopping malls, factories, hotels and worship centres. Disaster in most cases is unpredictable and the extent of damage equally unpredictable. Although disaster is an event which no library would wish for because of its devastating effects. Nevertheless, disaster also occurs in libraries. Many libraries all over the world have lost vital information sources some of which are irreplaceable, as a result of disaster. According to Anderson and McIntyre (1985) disaster in libraries is as an event, the timing of which is unexpected and the consequences seriously disruptive. Similarly, Alegbeleye (1993) describes disaster in libraries as the sudden removal of records and documents from accessibility and use. Furthermore, Cvetkovitch & Earle (1985) as cited by Alegbeleye (1993) broadly classify disaster as either natural or man-made. Based on the vital role that libraries play in acquiring, organizing and disseminating information to different categories of information seekers, it goes without saying that any sudden removal of library resources from accessibility and use could be catastrophic. Hence, the need to cautiously guard these resources against any form of disaster in order to prevent its occurrence or to minimize its effects.

Background information on University of Jos Library and fire disaster

University of Jos started as the Jos Campus of University of Ibadan in November 1971 and the Library was established in February 1972. Presently, there is a Central Library known as the Bauchi Road Campus Library which coordinates the activities of other Branch Libraries. The Branch Libraries include the Law Library, the Naraguta Campus Library and the Medical Library. The Central Library and the Law Library are located at the Bauchi Road Campus, while the Naraguta Campus Library is located at the University's Permanent Site at Naraguta Village; and the Medical Library is located at the Jos University Teaching Hospital's Permanent Site at Lamingo.

On the 27th March, 2013 a fire incident occurred at the Bauchi Road Campus Library. The fire which started at night, engulfed part of the Library's facilities and resources. Fortunately the fire was brought under control by the help of the Fire Service Men before it could spread further. Then, on the 8th of October, 2016 another fire broke out at dusk at the Naraguta Campus Library but unlike the first incident, this fire ravaged the entire facilities and resources inside the Library building; thus burning most of them to ashes. The fire which was best described as an "inferno" prompted many questions to be asked by some staff and students of the institution and from some members of the public on what went wrong and on how to avert a reoccurrence in the future.

Statement of the problem

After experiencing two major fire disasters in University of Jos Library, there is need to prevent a reoccurrence. But from observation, most of the Library Staff appear to be ignorant and ill-prepared towards the management of a fire disaster. Therefore, this study seeks to investigate Staff preparedness level towards fire disaster management in the Library.

Significance of the study

The present study is significant because it would greatly assist the Library Management to evaluate the need to develop a functional Disaster Management Plan that would guide the Library on what to do to prevent future occurrence of a fire disaster and other types of disaster in the Library.

Objectives of the study

The general objective of the study is to determine the Staff preparedness level towards fire disaster management in the Library.

The specific objectives are to determine the:

- i. Staff awareness level about general fire safety rules in the Library.
- ii. Staff awareness level about the fire-fighting equipment in the Library.
- iii. Staff preparedness level in the event of another sudden fire out-break in the Library.
- iv. Staff awareness level towards salvaging partly damaged Library resources in print and in digital media.
- v. Staff preparedness level towards salvaging partly damaged library resources in print and in digital media.
- vi. Constraints staff encountered in managing the two previous fire disasters.

Research questions

- i. What is the Staff awareness level about general fire safety rules in the Library?
- ii. What is the Staff awareness level about the fire-fighting equipment in the Library?
- iii. What is the Staff preparedness level in the event of another sudden fire out-break in the Library?
- iv. What is the Staff awareness level towards salvaging partly damaged Library resources in print and in digital media?
- v. What is the Staff preparedness level towards salvaging partly damaged Library resources in print and in digital media
- vi. What are the constraints the Staff encountered in managing the two previous fire disasters?

Review of related literature

There are various factors that can trigger the occurrence of a disaster in the surface of the earth. Some of which include sudden earth movement, climate change, volcanic eruption, human and animal activities etc. A disaster can occur suddenly and unexpectedly, taking people unawares and causing damages to places such as residential buildings, schools, institutions, libraries and

even lives. Mathew and Eden (1996) defined disaster in libraries as any incident which threatens to damage a library's building, collections, contents, facilities or services. Disaster could be natural or man-made. Common examples of natural disaster that can affect libraries include earthquakes, floods, tsunamis, tornadoes, hurricanes, tropical storms and wildfires. On the other hand common examples of man-made disaster that can affect libraries include water- leakages, deliberate or accidental fires, floods from poor drainages, burst pipes, burst dams, acts of terrorism and wars (Alegbeleye, 1993; Issa; Aliyu, Adedeji & Adegoke 2012). In the past up-to the present, there are records of major disasters that have destroyed different libraries all over the world. For instance, in 48 BC, there was a fire disaster at the Great Library of Alexandria, Egypt destroying the cultural heritage of that period (Murray; 2009). Furthermore, during the 2004 Indian Ocean Earthquake (tsunami), many Public Libraries at Banda Aceh were washed away by great flood waters resulting in the loss of almost all the Libraries' facilities and collections(Sakamoto; 2005). Another instance was the war in Croatia between 1991- 1995 where some Libraries suffered many direct and indirect war damages that resulted in fire and floods (Haseng & Krtalic, 2010). In the same vein, the Morgan Library at Colorado State University also experienced flooding in 1997 resulting in the loss of about half of its collections (Alire 2008). In Nigeria Oluwatola; Ogbuiyi, Oriogu and Ogbuiyi (2015) reported a fire disaster at the President Kennedy Library of Ahmadu Bello University Zaria where some collections of the Library were damaged.

According to Alegbeleye (1993) the two common types of disaster experienced by most libraries are fire and floods. Concurrently, Ratan (2013) carried out a research on the role of the library and information centres in disaster management and in the result obtained 43% of the respondents indicated that they have encountered disasters in the form of fire and flood. Juriyiah, Khalid and Doi (2015) in a similar study on disaster preparedness for academic libraries in Malaysia also found out that major disasters encountered by the respondents include flood 15 (14.7%), fire 4 (11.8%) and water leakage 3 (8.8%).

Disasters in libraries usually occur suddenly without any warning signs. Hence, the need to prepare ahead of time. Disaster preparedness entails carefully planning, it involves getting ready by putting the necessary measures in place so that in the event of a sudden occurrence of disaster the library would know what to do. The finding of a research conducted by Marfo and Borteye

(2016) on disaster preparedness in Kwame Nkrumah University of Technology Kumasi, Ghana revealed that the Library was not very prepared to prevent, fight or manage disasters. In the same vein, the finding of a research carried out by Owolabi, Lawal, Olukepde, Palemo and Odenigbo (2014) on disaster awareness and preparedness in Nigeria Polytechnic Libraries using 140 respondents revealed that majority of the staff were also not prepared for disaster.

Part of the measures that need to be put in place in preparing for disaster are facilities and equipment. These facilities and equipment vary depending on the type of disaster prevalent in a particular library. But since the most common types of disaster in libraries are fire and floods, there are some equipment that ought to be available in all libraries in order to manage such disasters. Thus fire extinguishers, fire alarm systems, automatic fire suppression systems, smoke/heat detectors, fire buckets, water detectors, flood extractors, wet pick-up vacuums, brooms, pales and mops are some of the equipment required to manage fire and flood disasters in libraries. In the finding of a research conducted by Sawant (2014) on preservation and conservation practices in academic libraries in Mumbai district of India using 41 respondents, most of the Libraries indicated that they have fire extinguishers 30 (85.7%). Similarly, in the findings of a research conducted by Ngulube and Magazi (2006) on protecting documents in Public Libraries in Kwa-zulu Natal, South Africa against disaster and theft using 50 respondents, all the respondents 50 (100%) indicated the availability of fire extinguishers in their Library buildings. Furthermore, majority of the respondents 43 (86%) also indicated that the fire extinguishers are updated and operable. More so, majority of the respondents 35 (75%) indicated that the fire extinguishers are inspected annually.

For any library to be fully prepared for a disaster, the staff must be aware of the possibility of a disaster. They must also be aware of the necessary measures needed to be taken in order to prevent the disaster from causing too much damage. Awareness is being informed or having the knowledge about something. Lack of awareness implies ignorance which consequences could be fatal. In the result of a study carried out by Oluwatola et al (2015) on disaster management practices in five public libraries in south/ west Nigeria majority of the staff indicated that they are fully aware of the disaster preparedness measures and have knowledge on how to use the available disaster equipment. In the same vein, Marfo and Borteye (2016) carried out a study on disaster preparedness in Kwame Nkrumah University of Technology Ghana, using 47 respondents

and in the result obtained, majority of the respondents 32 (68.1%) indicated that they are fully aware of the locations of the emergency exits, and the locations of the fire extinguishers 43(91.5%).

However, for any library to be prepared for any form of a disaster, there is need for the library to have a written down procedure in form of a disaster plan on what to do in case of a sudden occurrence of a disaster. Muir and Shenton (2002) identify disaster management plan to include management commitment, well maintained facilities, training and testing of procedures, actively aware and involved employees who take ownership of the process. They further asserted that “Preparing any library for disaster involves identifying possible hazards, mitigating their effects and identifying response measures”. Morgan and Smith (2014), carried out a research on the role of a disaster plan in managing disasters in libraries and from the result obtained majority of the libraries investigated were lacking in formal disaster plans. Furthermore, a similar research conducted by Ayoung, Batil and Baladi (2015) on disaster preparedness of polytechnic libraries in Ghana using 30 respondents showed a general absence of security policies and disaster plans in the libraries under investigation.

In spite of the need for libraries to have a functional disaster management plan that would guide them on what to do in event of a disaster, most libraries reported lack of sufficient funds, lack of trained manpower and lack of commitment from library staff as major constraints encountered in preparing fully for a disaster (Owolabi; 2104; Morgan & Smith 2014; Kolawole et al ; 2015; & Sawant 2014). In University of Jos Library, two fire disasters have been experienced. Two common questions were asked by many people who witnessed or heard about the last fire incident. The first question asked was “What went wrong?”, while the second questioned asked was “What could be done to avert a reoccurrence in the future?” Thus, the present study tries to find answers to the second question.

Methodology

Survey research method was adopted for the study in order to adequately measure the staff level of preparedness towards disaster management. The target population of the study comprised of all the 128 staff working in the library. As at the time of research, only 109 staff members were on ground. This is because the other 19 staff were on one form of leave or the other. Out of the

109 staff members, the 3 researchers involved in the research were excluded because they may be biased in their responses. Therefore a total of 106 staff members were used as respondents. Total enumeration method was used to generate data because the population was not too large. The data collection instruments used for the study were structured questionnaire and interview. The questionnaire comprised of two sections. Section A consists of questions on demographic data of respondents, while section B consists of questions on awareness, preparedness and constraints encountered towards disaster management. An interview session was arranged between the researchers and the University Librarian involving a face- face interaction where questions regarding the availability of a Disaster Management Plan were asked directly. This was done using an interview schedule comprising three questions.

Results and discussion

Out of the 106 copies of questionnaire distributed, 104 (98.11%) were completed, returned and found usable. Therefore, all the respondents (104) were used for the analyses of results of the study. The reason for the high response rate could be due to the fact that the researchers were familiar with all the respondents and they personally administered and collected the copies of questionnaire from the respondents after they had filled them.

Section A

Table 1. Distribution of participants based on gender, age, working experience and category of staff

Variable	Frequency	Percentage (%)
Gender		
Male	60	57.69
Female	44	42.30
Total	104	100
Age		
30 year and below	8	7.69
31-40	38	36.53
41-50	32	30.76
51-60	12	11.53

61-70	14	13.46
Total	104	100
Working Experience		
3 year and below	0	0
4- 6 years	24	23.07
7- 10 years	14	13.46
11-15	12	11.53
16 years and above	54	51.92
Total	104	100
Category of Staff		
Academic	14	13.46
Non- academic	90	86.53
Total	104	100

Table 1 shows that 60 (57.69%) males and 44 (42.30%) females participated in the research. This implies that there are more males than females in the Library. Based on age, majority of the respondents 38 (36.53%) are between the ages of 31-40. This implies that majority of the respondents are still in their youths. Based on working experience, majority of the respondents 54 (51.92%) have working experience of more than 16 years. This also implies that majority of the respondents have long working experience.

Section B

Table 2a. Staff awareness level towards general fire safety rules/measures in the Library

Items	Not aware	Slightly aware	Moderately aware	Very aware	Total (%)	Mean
Are you aware of the danger of naked wire in your office?	12 (11.53%)	6 (5.76%)	2 (1.92%)	84 (80.76%)	104 (100%)	3.51
Are you aware of the danger of faulty sockets, switches and extension boxes in your office?	10 (9.61%)	3 (2.88%)	7 (6.73%)	84 (80.76%)	104 (100%)	3.58
Are you aware that you are supposed to switch off all	0 (0%)	0 (0%)	0 (0%)	104 (100%)	104 (100%)	4

electrical appliances in your office before closing for the day from the office?						
Are you aware of the danger of not switching off electrical appliances after closing for the day from the office?	0 (0%)	0 (0%)	0 (0%)	104 (100%)	104 (100%)	4
Are you aware of the danger of forgetting to disconnect/switch off electric kettles and jugs immediately after use in the office?	0 (0%)	2 (1.92%)	6 (5.76%)	96 (92.30%)	104 (100%)	3.90
Are you aware of the danger of smoking cigarettes in the Library or near the Library building?	2 (1.92%)	4 (3.84%)	6 (5.76%)	92 (88.46%)	104 (100%)	3.80
Are you aware of the danger of bush/refuse burning near the Library building?	2 (1.92%)	2 (1.92%)	14 (13.46%)	86 (82.69%)	104 (100%)	3.76
Are you aware of the danger of keeping petrol, kerosene, gas, diesel or any other combustible substance in the Library or near the Library building?	4 (3.84%)	2 (1.92%)	8 (7.69%)	90 (86.53%)	104 (100%)	3.76
Are you aware of the location of the control switch in the Library?	9 (8.65%)	18 (17.30%)	22 (21.15%)	55 (52.88%)	104 (100%)	3.18
Are you aware of the existence of emergency exits in the Library?	23 (22.11%)	8 (7.69%)	23 (22.11%)	50 (48.07%)	104 (0%)	2.96
Are you aware of the locations of the emergency exits	12 (11.53%)	12 (11.53%)	24 (23.07%)	56 (53.84%)	104 (100%)	3.19
Are you aware of the number of the emergency exits?	17 (16.34%)	14 (13.46%)	24 (23.07%)	49 (47.11%)	104 (100%)	3.00
Are you aware of the place where the keys to the emergency exits are kept?	58 (55.76%)	14 (13.46%)	20 (19.23%)	12 (11.53%)	104 (100%)	1.86
Are you aware of the emergency number to call in the event of a sudden fire incidence in the library?	82 (78.84%)	4 (3.84%)	14 (13.46%)	4 (3.84%)	104 (100%)	1.42

Weighted average: 3.28 (82%)

Result from table 2a shows that majority of the respondents are very aware of the danger of naked wire, faulty sockets, switches and extension boxes 84 (80.76%); the danger of forgetting to disconnect boiling rings and electric kettles immediately after use 96 (92.30%) and the danger of not switching off electrical appliances after closing hours 104 (100%). The result also shows that majority of the respondents are equally very aware of the danger of smoking cigarettes in / near the Library building 92 (88.46%), the danger of bush/ refuse burning near the Library building 86 (82.69%) and the danger of keeping combustible substances in/near the Library building 90 (86.53%). Majority of the respondents are also very aware of the location of the control switch 55 (52.88%); the existence of emergency exits 50 (48.07%); the locations of the emergency exits 56 (53.84%) and the number of the emergency exits 49 (47.11%). In the result of a similar study carried out by Marfo and Borteye (2016), 32 (68.1%) respondents also indicated that they are fully aware of the location of the emergency exits in the Library under study.

However, majority of the respondents are not aware of the place where keys to the emergency exits are kept 58 (55.76%) and the emergency number to call in the event of a sudden fire incidence in the library 82 (78.84%).

The weighted average is 3.80 (82%). This implies that averagely the respondents are very aware of the general fire safety rules and safety measures in the Library. This could be so because most adults are always conscious of the havoc that fire disaster can cause both at home and at work without necessarily being told.

Table 2b. Staff awareness level about the fire-fighting equipment in the Library

Items	Not aware	Slightly aware	Moderately aware	Very aware	Total (%)	Mean
Are you aware of the availability of fire extinguishers in the Library?	4 (3.84%)	6 (5.76%)	16 (15.38%)	78 (75%)	104 (100%)	3.61
Are you aware of the locations of the fire extinguishers?	7 (6.73%)	11 (10.57%)	52 (50%)	34 (32.69%)	100 (100%)	3.08
Are you aware of the number of the fire	56 (53.84%)	16 (15.38%)	10 (9.61%)	22 (21.15%)	104 (100%)	1.98

extinguishers?						
Are you aware of the availability of fire buckets(buckets filled with sand) in the Library?	14 (13.46%)	60 (57.69%)	12 (11.53%)	18 (17.30%)	104 (100%)	2.32
Are you aware of the locations of the fire buckets?	16 (15.38%)	66 (63.46%)	12 (11.53%)	10 (9.61%)	104 (100%)	2.15
Aware you aware of the number of the fire buckets?	55 (52.88%)	15 (14.42%)	18 (17.30%)	16 (15.38%)	104 (100%)	1.95
Are you aware of the availability of pails for fetching water in the Library?	22 (21.15%)	20 (19.23%)	42 (40.38%)	20 (19.23%)	104 (100%)	2.57
Are you aware of the location of the pails?	14 (13.46%)	60 (57.69%)	14 (13.46%)	16 (15.38%)	104 (100%)	2.30
Are you aware of the number of the pails?	56 (53.84%)	16 (15.38%)	13 (12.5%)	19 (18.26%)	104 (100%)	1.95
Are you aware of the availability of water tank for the Library?	16 (15.38%)	10 (9.61%)	17 (16.34%)	61 (58.65%)	104 (100%)	3.18
Are you aware of the location of the water tank?	18 (17.30%)	7 (6.73%)	22 (21.15%)	57 (54.80%)	104 (100%)	3.13
Are you aware of the availability of taps in and outside the Library?	18 (17.30%)	4 (3.84%)	18 (17.30%)	64 (61.53%)	104 (100%)	3.23
Are you aware of the locations of the taps?	16 (15.38%)	4 (3.84%)	16 (15.38%)	68 (65.38%)	104 (100%)	3.30
Are you aware of the number of taps?	49 (47.11%)	19 (18.26%)	0 (0%)	36 (34.61%)	104 (100%)	2.22
Weighted average: 2.64 (66.01%)						

Result from table 2b shows that majority of the respondents are very aware of the availability of fire extinguishers in the Library 78 (75%), but moderately aware of the locations of the fire extinguishers 52 (50%). Marfo and Borteye (2016), in a similar study also found out that 43 (91.5%) respondents are aware of the locations of the fire extinguishers in the Library under study.

Majority of the respondents are also very aware of the availability of water tank outside the Library building 61 (58.65%) and the location of the water tank 57 (54.80%). Furthermore, majority of the respondents are also very aware of the availability of taps in and outside the Library building 64 (61.53%) and the locations of the taps 68 (65.38%). However, majority of the respondents are moderately aware of the availability of pails for fetching water 42 (40.38%) and slightly aware of the location of the pails 60 (57.69%). More-so majority of the respondents are also slightly aware of the availability of fire buckets 60 (57.69%) and their locations 66 (63.46%). It is worthy of note that fire buckets are buckets filled with sand used in extinguishing small fires.

On the other hand, majority of the respondents are not aware of the number of fire extinguishers 56 (53.84%), number of fire buckets 55 (52.88%); number of pails 56 (53.84%) and number of taps 49 (47.11%). This could be so because the respondents may not have seen the need to count the number of the fire- fighting equipment in the Library.

The weighted average is 2.64 (66.01%) which implies that averagely the respondents are moderately aware of the availability of the fire- fighting equipment in the library. This finding supports the finding of Oluwatola et al (2015) on disaster management in five public libraries in south/ west Nigeria in which majority of the respondents indicated that they are aware of the fire-fighting equipment their libraries.

Table 2c. Staff preparedness level towards using the fire-fighting equipment in the Library

Items	Not prepared	Slightly prepared	Moderately prepared	Very prepared	Total (%)	Mean
What is your level of preparedness towards using the fire extinguishers? By checking their locations, number, functionalities, type of extinguishers,	72 (69.23%)	20 (19.23%)	8 (7.69%)	4 (3.84%)	104 (100%)	1.46

and expiry dates.						
What is your level of preparedness towards using the fire buckets? By checking their locations, number, and quantity of sand.	84 (80.76%)	14 (13.46%)	2 (1.92%)	4 (3.84%)	104 (100%)	1.28
What is your level of preparedness towards using water from the tap/tank? By checking their locations and constant availability of water.	78 (75%)	18 (17.30%)	4 (3.84%)	4 (3.84%)	104 (100%)	1.36
What is your level of preparedness towards using the emergency exits? By constantly checking the location of the keys and how easily the keys can open the doors in the event of a sudden fire incidence in the Library.	76 (73.07%)	20 (19.23%)	2 (1.92%)	6 (5.76%)	104 (100%)	1.40
What is your level of preparedness towards using the control	74 (71.15%)	18 (17.30%)	6 (5.76%)	6 (5.76%)	104 (100%)	1.46

switch? By constantly inquiring about its state from those in charge, checking its location and how easily it can be switched off in the event of a sudden fire incidence in the Library?						
What is your level of preparedness towards calling the emergency phone numbers of the fire –fighters? By saving the numbers in your mobile phone or by keeping the list of numbers handy.	82 (78.84%)	10 (9.61%)	4 (3.84%)	8 (7.69%)	104 (100%)	1.40
Weighted average: 1.39 (34.83%)						

Result from table 2c shows that majority of the respondents are not prepared towards using the fire- extinguishers 72 (69.23%), the fire buckets 84 (80.76%) and water from the tap/tank 78 (75%). Majority of the respondents are also not prepared towards using the control switch 74 (71.15%), the emergency exits 76 (73.07%) and calling the emergency numbers of the fire-fighting men 82 (78.84%). The weighted average is 1.39 (34.83%). This implies that averagely, the respondents are not prepared towards using the fire- fighting equipment in the Library. This finding supports the finding of Owolabi et al (2014) on disaster awareness and preparedness in Nigeria polytechnic libraries using 140 respondents in which majority of the respondents indicated that they are not prepared towards using the fire- fighting equipment in their libraries. The finding also supports the finding of Ayoung et al (2015) on disaster preparedness in

polytechnic libraries in Ghana using 30 respondents in which majority of the respondents indicated that they are ill- prepared with respect to disaster management in their libraries.

Table 2d. Staff frequency of checking the functionality of the fire-fighting equipment in the Library

Items	Never	Seldom	Sometimes	often	Always	Total (%)	Mean
How frequently do you check the functionality of the fire extinguishers?	48 (46.15%)	26 (25%)	18 (17.30%)	10 (9.61%)	2 (1.92%)	104 (100%)	1.96
How frequently do you check the availability of sand in the buckets?	66 (63.46%)	18 (22.11%)	8 (7.69%)	6 (5.76%)	6 (5.76%)	104 (100%)	1.73
How frequently do you check the availability of water in the tank/taps?	17 (16.34%)	23 (22.11%)	17 (16.34%)	15 (14.42%)	32 (30.76%)	104 (100%)	3.21
How frequently do you check the functionality of the keys to the emergency exits?	52 (50%)	12 (11.53%)	24 (23.07%)	8 (7.69%)	8 (7.69%)	104 (100%)	2.11
How frequently do you check the functionality of the control switch?	56 (53.84%)	14 (13.46%)	16 (15.38%)	9 (8.65%)	9 (8.65%)	104 (100%)	2.04
How frequently do you check the functionality of the emergency phone numbers?	82 (78.84%)	9 (8.65%)	5 (4.80%)	5 (4.80%)	3 (2.88%)	104 (100%)	1.44
Weighted average: 2.08 (41.63%)							

Result from table 2d shows that majority of the respondents never check the functionality of the fire extinguishers 48 (46.15%). This is in contrast to the finding of Ngulube and Magazi (2006) on protecting documents in public libraries in kwazulu Natal, South Africa against disaster and theft using 50 respondents in which majority of the respondents 35(70%) indicated that they usually inspect their fire extinguishers annually. Result from table 2d also shows that majority of the respondents never check the availability of sand in the buckets 66 (63.46%) and never checked the functionality of the control switch 56 (78.84%). Furthermore, the result also shows that half of the respondents never checked the location of the keys to the emergency exits and the functionality of the keys 52 (50%). However, few respondents indicated that they always check the availability of water in the tap/tank 32 (30.76%).The weighted average is 2.02 (40.4%). This implies that averagely the respondents seldom check the functionality of the fire- fighting equipment.

Table 3a. Staff awareness level towards salvaging slightly damaged Library resources in print and in digital media

Items	Not aware	Slightly aware	Moderately aware	Very aware	Total (%)	Mean
Are you aware of what to do towards salvaging slightly damaged resources in print such as textbooks, reference materials, theses and dissertations?	74 (71.15%)	18 (17.30%)	6 (5.76%)	6 (5.76%)	104 (100%)	1.46
Are you aware of what to do towards salvaging slightly damaged periodicals in print such as journals, newspapers and magazines?	55 (52.88%)	36 (34.61%)	6 (5.76%)	7 (6.73%)	104 (100%)	1.66
Are you aware of what to do towards salvaging slightly damaged resources in digital	71 (68.26%)	18 (17.30%)	6 (5.76%)	9 (8.65%)	104 (100%)	1.54

media such as optical discs and magnetic tapes?						
Weighted average: 1.55 (38.75%)						

Table 3a shows that majority of the respondents are not aware of what to do towards salvaging slightly damaged print materials 74 (71.15%), slightly damaged periodicals 55 (52.88%) and slightly damaged resources in digital storage media 71 (68.26%). The weighted average is 1.55 (38.75%). This implies that averagely, majority of the respondents are not aware of what to do towards salvaging partly damaged library resources.

Table 3b. Staff preparedness level towards salvaging slightly damaged resources in print and in digital media

Items	Not prepared	Slightly prepared	Moderately prepared	Very prepared	Total (%)	Mean
What is your level of preparedness towards salvaging slightly damaged resources in print?	67 (64.42%)	28 (26.92%)	5 (4.80%)	4 (3.84%)	104 (100%)	1.48
What is your level of preparedness towards salvaging slightly damaged periodicals in print?	73 (70.19%)	26 (25%)	3 (2.88%)	2 (1.92%)	104 (100%)	1.36
What is your level of preparedness towards salvaging slightly damaged resources in digital media?	72 (69.23%)	27 (25.96%)	4 (3.84%)	1 (0.96%)	104 (100%)	1.36
Weighted average: 1.40 (35%)						

Result from table 3b shows that majority of the respondents are not prepared towards salvaging the partly damaged resources in print 67 (64.42%), partly damaged periodicals in prints 73 (70.19%) and partly damaged resources in digital media 78 (75%). The weighted average is 1.40 (35%) which implies that averagely, staff are not prepared towards salvaging partly damaged library resources in print and digital media.

Table 4. Constraints staff encounter in disaster management

Items	Strongly disagree	Disagree	Agree	Strongly agree	Total (%)	Mean
Lack of awareness on the availability of the fire-fighting equipment	12 (11.53%)	46 (44.23%)	18 (17.30%)	28 (26.92%)	104 (100%)	2.59
Lack of enough fire-fighting equipment	4 (3.84%)	16 (15.38%)	48 (46.15%)	36 (34.61%)	104 (100%)	3.11
Lack of staff training on how to use the fire-fighting equipment	3 (2.88%)	3 (2.88%)	42 (40.38%)	56 (53.84%)	104 (100%)	3.45
Lack of modern fire- fighting equipment such as fire alarms, fire-suppression system and smoke detectors	4 (3.84%)	0 (0%)	44 (42.30%)	56 (53.84%)	104 (100%)	3.46
Lack of a functional disaster management plan	6 (5.76%)	8 (7.69%)	36 (34.61%)	54 (51.92%)	104 (100%)	3.32
Weighted average: 3.18(79.5%)						

Result from table 4 shows that majority of the respondents agree that lack of enough fire-fighting equipment is a constraint in managing disaster in the Library 48 (46.15%). Furthermore, majority of the respondents strongly agree that lack of modern fire- fighting equipment 56 (53.84%) and lack of a functional disaster management plan 54 (51.92%) are also constraints encountered. Finally, majority of the respondents strongly agree that lack of training on how to use the fire- fighting equipment 56 (53.84%) is also a constraint in managing disaster in the library. This is in contrast to the finding of Ngulube and Magazi (2006) in which half of the respondents 20 (40%) indicated that they have been trained in the use of fire

extinguishers and know how to operate them. It is also in contrast to the finding of Oluwatola et al (2015) in which majority of the respondents indicated that they have knowledge on how to use the available fire- fighting equipment.

However, majority of the respondents 46 (44.23%) disagree that lack of awareness of the availability of fire-fighting equipment is a constraint. The weighted average is 3. 18 (79.5%). This implies that averagely, majority of the respondents strongly agree that they encounter constraints when managing disaster in the Library.

Interview result

Result of the interview with the University Librarian revealed that there is a Disaster Management Plan that was developed in the past for the whole University which also covers the issue of disaster in the Library. The result also revealed that a copy of the Disaster Management Plan is available in the Library and it is also implemented in the Library to manage disaster. This finding is in contrast to the finding of a related work by Ayoung et al (2015) and Morgan et al (2014) which revealed a general absence of Security Policies and Disaster Plans in the Libraries under study.

Conclusion

The present study was designed to examine the level of staff preparedness towards fire disaster management in University of Jos Library. From the analyses of results obtained through the questionnaire, it could be deduced that staff are very aware of fire safety measures and the availability of fire-fighting equipment in the Library. However, they are not prepared towards using the fire-fighting equipment and they seldom check the functionality of the equipment. It could also be deduced that staff are not aware of what to do and also not prepared towards salvaging partly damaged library resources in print and digital media. More so, there are constraints staff encounter in management disaster in the Library. Finally, from the interview result obtained, there is a Disaster Management Plan which is used in managing disaster in the Library.

Recommendations

1. There is need for the Library Staff to be aware of the availability of a Disaster Management Plan in the Library. At the same time based on the outline of the Plan, each Staff should be assigned different roles in disaster prevention and preparedness. By so doing, each Staff would know what to do and would also be adequately prepared towards managing disaster.
2. The Library Management should constitute a Disaster Management Committee that would study and evaluate the need to review the Disaster Management Plan that was developed some years ago so as to update its content to cover more modern ways of managing disaster.
3. More fire-fighting equipment should be acquired by the Library in order to adequately equip the Library towards managing fire disaster.
4. Modern fire- fighting equipment such as smoke detectors, fire alarms and fire suppression system should be acquired and installed in the Library and Staff should be trained on how to use them in order to ensure quicker emergency response.
5. Experts should be invited to train staff on how to salvage partly damaged Library resources in print and in digital media. This would enable the recovery of some resources in the event of a sudden fire out-break instead of incurring total loss.
6. Finally, period drills/ trainings should be organized by the Library towards Disaster Management. This would make the staff conscious of the fact that disaster can happen at any time and there is need to be alert. If not they may tend to forget.

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